

## The Influence of Sale Promotion Factors on Purchase Decisions: A Case Study of Portable PCs in Thailand

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**Abstract.** The aim of this research is to investigate the sale promotion factors that impact on consumers' purchasing decision on Portable PCs or notebooks in Thailand. This study was designed to use the survey research method and the convenience sampling technique was used in collecting the sample data. Questionnaires were distributed to qualified respondents in Commart Thailand 2011 Event at Queen Sirikit Convention Center on 17th – 20th March 2011. A total of 191 respondents were participated in this study. The data were analyzed and summarized with SPSS software and binary logistic regression analysis was used to examine which sale promotion factors that impact on consumers' purchasing decision of Portable PC Acer and Compaq & HP. The results of this research is indicated that the sale promotion factors "Offer member card for discount", "Extend warranty period", "Bundled with scanner", "Billboard, radio, leaflet, and magazine", and "Able to pay by installments" are the important factors that impact on consumers' purchasing decision on Portable PCs. Furthermore, the researcher found that the marketer can enhance more effectiveness of customers need, increase customer base and make more market shares in this segmentation by using sale promotion strategies about developing member card for discount, increasing the number of advertising media, warranty period conditions, setting the special premiums, and how to pay by instalments. These strategies should be developed continuously.

**Keywords:** Sale Promotion Factors, Binary Logistic Regression Analysis, Portable PCs, Notebooks

### 1. Introduction

In today's world, computers are useful and powerful tools for performing various tasks in work, school, and home settings, and computer that use there is both Desktop PC and Portable PC. The International Data Corporation (IDC, 2010) reported in July 2010 that the yearly growth rate for the worldwide PC market in 2009 was 2.9%. Portable PCs remained the key market driver, with shipments increasing 18.4% in 2009 compared to 2008. Consumer purchases of portable PCs were the sole driver of the market, growing at 38.5%. IDC report (2009) mentioned that in 2009 the average household in the Asia/Pacific excluding Japan (APEJ) region has two PCs and bought a mininotebook as an additional PC. Among the survey respondents, 60% indicated that they would still purchase a regular notebook as their next PC. Most respondents indicated that the length of warranty and after-sales support were the most important factors influencing their decision in purchasing a new PC. On the other hand, PC brand and store location were among the least important concerns when purchasing a new PC.

According to IDC (2010) reported in July 2010, PC market grew 15% sequentially and 36% year-on-year in 2Q10 to reach 27 million units. IDC report in October 2010 mentioned that HP was the number one of market share numbers in worldwide with 91.5 million units. It was followed respectively by HP (15.6 million), Acer (11.6 million), Dell (11 million), Lenovo (9.2 million), and ASUS (4.8 million) in year 2010. PC& Associates Consulting in Thailand (2011) reported that Acer Thailand still as a leading and No. 1 brand in overall PC market quantity with 18 per cent growth. Notebook computer sales alone soared 22 %. At the

global level, Acer reached second spot in worldwide PC market ranking in the 3rd quarter 2010, with market share of 15.4 per cent, up five percentage points from year 2009. Acer also enjoyed record sales of 10.96 million notebook computers, or growth of 25.6 per cent, in year 2010.

Rancid Taste (2011) indicated that before buying or purchasing a laptop or notebook, we should consider some of the most mandatory factors are: Mobility and portability, Battery and its lifetime, RAM and speed, Video card and graphics, Connectivity and wireless technology, Peripherals and ports, keyboard and pointing device, Heat and noise, DVD burner, Anti-theft device, and Warranty. Thainotebook.com (2011) reported that Portable PC was needed to use in many areas such as seeing the movies or photos, listening to music, playing games, and using the internet. Buying the Portable PC should also consider the related as type of notebook, price, format to use, Brand of the manufacturer, warranty after sales service, etc.

Currently, because of the increasing demand and having high competition of the Portable PC market in Thailand, competitor in this business attempt to use the marketing strategies in order to get more effectively needed of the consumer, increase customer base and make more market share in this business. The promotion strategies such as launching a new sale promotion for attractive consumer became the one of the major tools in this business. Therefore, it is meaningful to investigate the sale promotion factors that impact on consumers' purchasing decision of Portable PC in Thailand in order to provide the sale promotion strategies' guidelines to the marketer in this business.

## **2. Background**

### **2.1. Definition and Features of the Dependent Variable**

Skinner (1994) mentioned that the market for any product category is made up of consumers who differ in their responsiveness to deals. Some consumers are loyal to a single brand in a category and buy only that brand. These on-and off-deal consumers fall into two general categories, loyalists and switchers. Loyalists are consumers whose purchase patterns reflect that they buy the same brand over and over when no brands are on deal (when the category is off promotion). Switchers are the consumers who even when all brands in a category are off promotion nonetheless switch among different brands. Kotler (2000) refers that consumers have varying degrees of loyalty to specific brands stores, and other entities. Fishbein and Ajzen (1975) stated that Brand switching means that a consumer is induced to purchase a brand other than the one that would have been purchased had the promotion not been available. Purchase acceleration means that a consumer's purchase timing or purchase quantity is influenced by promotion activities.

### **2.2. Definition and Features of the Independent Variables**

Kotler (2000) highlighted that sales promotion is the short-term incentives to encourage purchase or sales of product or service. Sales promotion targeted toward final buyers (consumer promotion), business customers (business promotions), retailers and wholesale (trade promotions), and members of the sales force (sales force promotions). Sales promotions fall into two types, value increasing and value adding. Value-increasing promotions manipulate the quantity/price equation (and sometimes the quality/price relationship) to increase the perceived value of a product offering. Examples of these would be discounts, coupons, payment terms, multi-packs, multi-buys or quantity increase. Value-adding promotions manipulate the price and core product untouched, and offer the customer something extra. Examples of these are product trial or samples, valued packaging, free gifts, loyalty schemes or clubs, information (such as a brochure or in-store magazine) or a competition. In high competition in retail business, sales promotion is the one important tool that many companies or organizations will use to compete with the competitors and stimulate sales.

Sales promotion includes several communications activities that attempt to provide added value or incentives to consumers, wholesalers, retailers, or other organizational customers to stimulate immediate sales. These efforts can attempt to stimulate product interest, trial, or purchase. Examples of devices used in sales promotion include coupons, samples, premiums, point-of-purchase (POP) displays, contests, rebates, and sweepstakes (Dave Dolak, 2010). There are three types of sales promotion strategies: *Push*, *Pull*, or a *combination* of the two.

A **push** strategy involves convincing trade intermediary channel members to "push" the product through the distribution channels to the ultimate consumer via promotions and personal selling efforts. Typical tactics

employed in push strategy are: allowances, buy-back guarantees, free trials, contests, specialty advertising items, discounts, displays, and premiums (Dave Dolak, 2010).

A **pull** strategy attempts to get consumers to "pull" the product from the manufacturer through the marketing channel. Typical tactics employed in pull strategy are: samples, coupons, cash refunds and rebates, premiums, advertising specialties, loyalty programs/patronage rewards, contests, sweepstakes, games, and point-of-purchase (POP) displays (Dave Dolak, 2010).

### 2.3. Variables of the Study

The variables explicate the relationship between sale promotion factors and consumer's buying decision based on previous empirical researches provides evidence is shown as follow:

**Dependent Variable:** Consumers' purchasing decision on Acer and Compaq & HP

**Independent Variables:**

1. Attractive price
2. Upgrade RAM
3. Bundled Window OS
4. Bundled with printer
5. Bundled with scanner
6. Billboard, radio, leaflet, and magazine
7. Able to pay by instalments
8. Premium items (Bag/Software/Game/Accessory/Free Internet)
9. Offer member card for discount
10. Extend warranty period

### 2.4. Pretest of the Survey Instrument & Data Collection

This study was designed to use the survey research method; the convenience sampling technique was used in collecting the sample data. Pre-test was conducted and measures the reliability coefficient (Cronbach's alpha). The results are showed that the overall Cronbach's alpha coefficient of survey instrument or questionnaire is 0.706 which is acceptable. The questionnaires were distributed to respondent who have ever used and intend to purchase Portable PC within 3 months among top two brands (Acer and Compaq & HP) in Thailand at Commart Thailand 2011 Event at Queen Sirikit Convention Center on 17th – 20th March, 2011. A total of 191 respondents were participated in this study.

### 2.5. Data Analysis and Results

The data were analyzed and summarized with SPSS. Since the dependent variable is the qualitative variable, binary logistic regression analysis was used to examine which sale promotion factors that impact on consumers' purchasing decision of Portable PC Acer and Compaq & HP.

**Binary Logistic Regression:** It exists to handle the case of dependents with two classes. It is useful for situations in which the researcher wants to be able to classify subjects based on values of a set of predictor (independent) variables. In this way, logistic regression estimates the odds of a certain event occurring. Note that logistic regression calculates changes in the log odds of the dependent, not changes in the dependent itself as OLS regression does [Garson, 2009]. Logistic regression makes no assumption about the distribution of the independent variables. The relationship between the independents and dependent variables is not a linear function in logistic regression. Therefore, the *logistic response function* is by  $0 \leq E(Y) \leq 1$

$$P(Y = 1) = E(Y) = \frac{e^{\beta_0 + \beta_1 X_1 + \dots + \beta_p X_p}}{1 + e^{\beta_0 + \beta_1 X_1 + \dots + \beta_p X_p}}, \beta_i \text{ are logistic coefficients to be estimated; } i = 1, 2, \dots, p$$

For logistic regression, the "parameter estimate" is the *B* coefficient used to predict the log odds (logit) of the dependent variable. The *B* coefficients with 0 indicate that the given explanatory variable does not affect the logit (that is, makes no difference in the probability of the dependent value equalling the value of the event, usually 1); positive or negative *B* coefficients indicate the explanatory variable increases or decreases the logit of the dependent. Exp (*B*) is the odds ratio for the explanatory variable. The odds ratio for a given independent variable represents the factor by which the odds (event) change for a one-unit change in the independent variable. An Exp (*B*) > 1 means the independent variable increases the logit and therefore increases odds (event). If Exp (*B*) < 1.0, then the independent variable decreases the logit and decreases odds (event). Thus, to find the influential factors on the dependent variable, it will consider the only factors which have the significance and the value of Exp (*B*) > 1 [Garson, 2009].

#### Demographic Information

Acer: Of the 105 respondents, approximately 27.7% were male, 31.4% were age between 26-35 years old, and 35.6% were in Bachelor's degree. The majority group of respondents was the employee approximately 45.5%, 22.5% has income between 10,000 – 20,000 baht per month. The 46.6% will buy the Portable PC for working purpose; communication is the second purpose approximately 4.7%. The 34% of respondents consider that the suitable price was between 30,001-45,000 baht. The event was the best place in buying a Portable PC (28.3%) and Puntip Plaza was the second place to buy Portable PC (15.3%).

Compaq & HP: Of the 86 respondents, approximately 27.2% were female, 25.1% were age between 26-35 years old and 23.6% were in Bachelor's degree. The majority group of respondents was the employee approximately 38.7%, 15.7% has income between 10,000 – 20,000 baht per month. The 41.4% will buy the Portable PC for working purpose; communication is the second purpose approximately 2.1%. The 25.7% of respondents consider that the suitable price was between 30,001-45,000 baht. The event was the best place in buying a Portable PC (25.1%) and Puntip Plaza was the second place to buy Portable PC (8.4%).

### Sales Promotion Factors Impact on Consumers' Purchasing Decision

Regarding to binary logistic regression analysis, it can be obtained the sale promotion factors impact on consumers' purchasing decision of Portable PC in Thailand as presented follows:

#### Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	10.713	8	0.218

#### Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	227.637 <sup>a</sup>	0.177	0.236

a. Estimation terminated at iteration number 4 because parameter estimates changed by less than 0.001.

#### Classification Table<sup>a</sup>

	Observed	Predicted		
		Acer	Compaq & HP	Percentage Correct
Step 1	Acer	83	22	79.0
	Compaq & HP	42	44	51.2
	Overall Percentage			66.5

a. The cut value is .500

Figure 1: Summary Table of Parameter Estimates of Binary Logistic Regression

From Figure 1, since the Sig. value (0.218) of the Hosmer and Lemeshow Test is greater than  $\alpha = 0.10$ , it can conclude the final model is the model adequately fits these data. From the table Model Summary, Nagelkerke gave the highest R<sup>2</sup> with 0.236. This means that the full model can 23.6% explain the outcome. From Classification Table, it was found that, the final model can classifies 66.5% correct, which may seem moderately good.

Table 1. Significance Variables in the Equation

Factors	Acer			Compaq & HP		
	B	Sig.	Exp(B)	B	Sig.	Exp(B)
Bundled with scanner	-0.450	0.004*	0.638	0.450	0.004*	1.568
Billboard, radio, leaflet, and magazine	-0.284	0.082*	0.753	0.284	0.082*	1.328
Able to pay by installments	-0.523	0.001*	0.593	0.523	0.001*	1.686
Offer member card for discount	0.273	0.090*	1.314	-0.273	0.090*	0.761
Extend warranty period	0.286	0.052*	1.332	-0.286	0.052*	0.751

Remarks: \* has the significance at 0.10 level of significance

Table 1 shows the comparison of the sale promotion factors that impact on consumers' purchasing decision of Portable PC. Comparing the value of Exp (B) of Acer and Compaq & HP found that for the

factor “Offer member card for discount” (1.314) and “Extend warranty period” (1.332), Acer has the greater value of Exp (B) than Compaq & HP. This means that if both Acer and Compaq & HP have the same details of “Offer member card for discount” and “Extend warranty period” of Portable PC, consumers will be likelihood to purchase Portable PC from Acer whereas Compaq & HP has the greater value of Exp (B) than Acer for the factor “Bundled with scanner”(1.568), “Billboard, radio, leaflet, and magazine”(1.328), and “Able to pay by installments”(1.686). This could be said that if both Acer and Compaq & HP have the same details “Bundled with scanner”, “Billboard, radio, leaflet, and magazine”, and “Able to pay by installments” of Portable PC, consumers will be likelihood to purchase Portable PC from Compaq & HP.

## 2.6. Conclusions

According to the results, the study indicates that the sales promotion factors “Offer member card for discount” , “Extend warranty period” , “Bundled with scanner” , “Billboard, radio, leaflet, and magazine”, and “Able to pay by installments” are the important factors that impact on consumers’ purchasing decision. Portable PC in the study should focus on these sales promotion factors in order to increase the customer base and make more market share in this segmentation as follow:

**Acer** should maintain a strategy about “Offer member card for discount” and “Extend warranty period”. This means that Acer should update/develop member card for discount and warranty period conditions continuously in order to increase the customer base over the competitors.

**Compaq & HP** should maintain a strategy about “Bundled with scanner”, “Billboard, radio, leaflet, and magazine”, and “Able to pay by installments”. This means that Compaq & HP should increase the number of billboards, radio, leaflet, and magazine. Moreover, Compaq & HP should use the special sale promotion tools such as premiums, how to pay by installments in order to attract their customers which it make increasing in the sale volume and the customer base.

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